

CLAIMS

1. A polarizing plate with optical compensation function, the polarizing plate comprises a polarizing layer and an optically compensating layer, wherein
 - 5 the optically compensating layer comprises an optically compensating A-layer comprising a polymer film, and an optically compensating B-layer comprising a cholesteric liquid crystal layer.
2. The polarizing plate with optical compensation function according to claim 1,
 - 10 wherein the polarizing layer and the optically compensating layer are arranged so that an angle formed by an absorption axis of the polarizing layer and a slow axis of the optically compensating A-layer is not smaller than 85° and not larger than 95°.
3. The polarizing plate with optical compensation function according to claim 1,
 - 15 wherein the optically compensating A-layer meets requirements indicated by the following formulae (I) and (II):
$$20 \text{ (nm)} \leq R_{\text{e}} \leq 300 \text{ (nm)} \quad (\text{I})$$
$$1.2 \leq R_{\text{th}}/R_{\text{e}} \quad (\text{II})$$
in the formulae,
- 20 Re (retardation value in normal direction) = $(n_x - n_y) \cdot d$
Rth (retardation value in thickness direction) = $(n_x - n_z) \cdot d$;
where n_x , n_y and n_z respectively denote refractive indices of X axis, Y axis and Z axis
in the optically compensating A-layer; the X axis denotes an axial direction
presenting a maximum refractive index within the optically compensating A-layer,
25 the Y axis denotes an axial direction perpendicular to the X axis within the optically
compensating A-layer, and the Z axis denotes a thickness direction perpendicular to
the X axis and the Y axis; 'd' denotes the thickness of the optically compensating
A-layer.
- 30 4. The polarizing plate with optical compensation function according to claim 1,
wherein a selectively reflection wavelength range of the cholesteric liquid crystal
layer is in a range not larger than 350 nm.
- 35 5. The polarizing plate with optical compensation function according to claim 1,
further comprising at least one of an alignment layer and a base.
6. The polarizing plate with optical compensation function according to claim 1,

wherein the polymer film is either a stretched film or a liquid crystal film.

7. The polarizing plate with optical compensation function according to claim 1, further comprising a pressure-sensitive adhesive layer, the pressure-sensitive adhesive layer being arranged on one of the surfaces of the polarizing plate.
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8. A liquid crystal display comprising a liquid crystal cell and a polarizing plate, wherein the polarizing plate is the polarizing plate of claim 1 and is arranged on at least one surface of the liquid crystal cell.
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9. An image display comprising the polarizing plate according to claim 1.